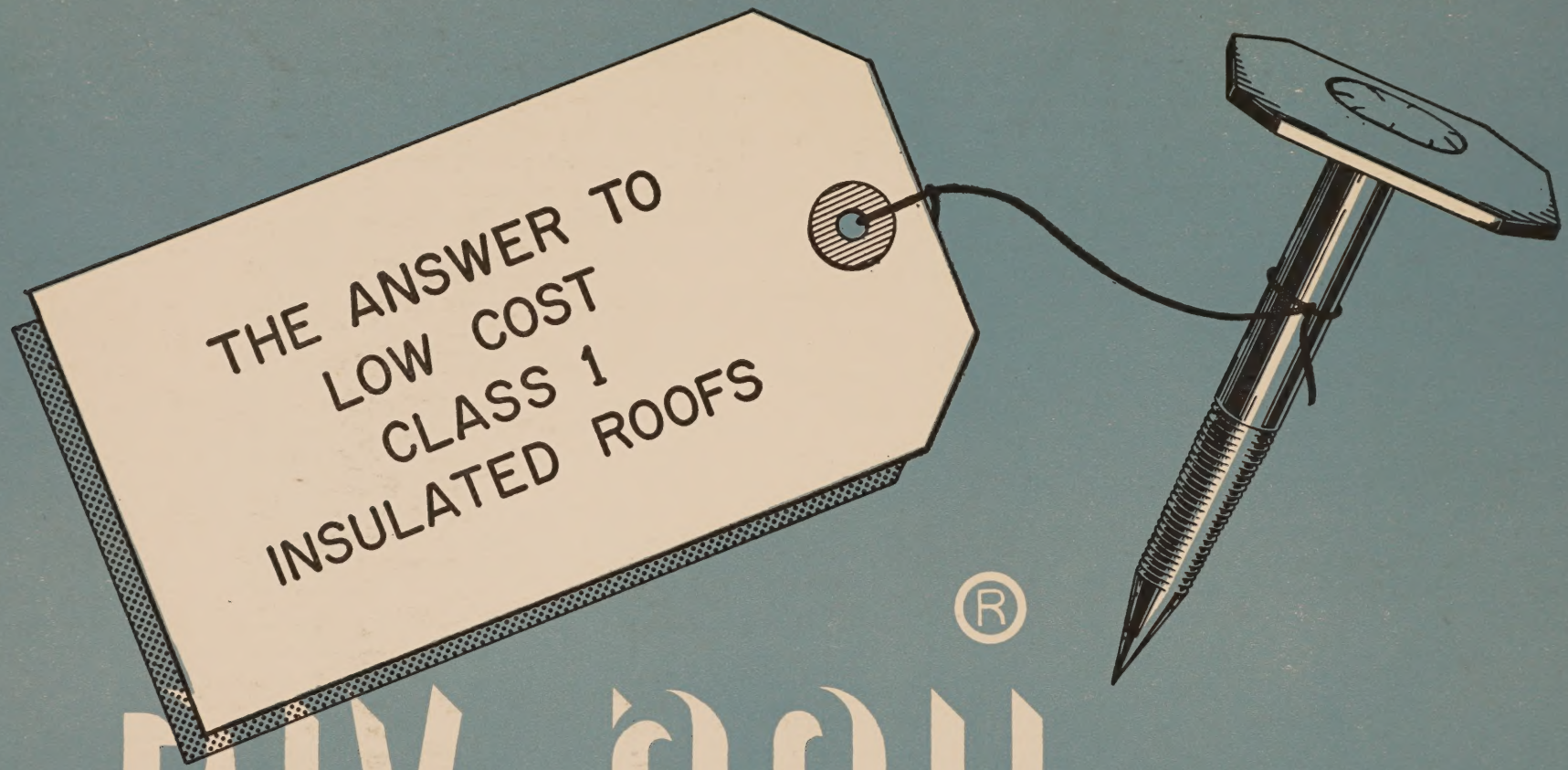


RIV-NAIL®

FOR NAILING INSULATION TO METAL DECKS

ES/Products, Inc. - Mamaroneck, N. Y.

RIV-NAIL®

FOR YOUR FILE (A. I. A. NO. 12-C)

A FACT FOR CLASS 1 ROOFS RIV-NAIL IS THE MOST ECONOMICAL MEANS OF ATTACHING INSULATION TO METAL DECKS.

WHY A CLASS I ROOF?

BECAUSE IT IS FIRE-RETARDANT, PERMITS LOWER INSURANCE COSTS AND DOES NOT IN ITSELF REQUIRE SPRINKLER PROTECTION.

Plain fiberboard insulation, nailed directly to steel roof deck with "RIV-NAIL", is accepted by the major fire insurance associations as Class I construction.

Only the hermetic sealing "RIV-NAIL" prohibits vapor migration and pitch drippage at point of penetration.

If a vapor barrier other than that provided by the steel deck is desired, simultaneous attachment of insulation and acceptable membrane to the deck with "RIV-NAIL" is also considered Class I.

ENDORSEMENTS

RIV-NAI LIS RECOMMENDED AND APPROVED BY THE FOLLOWING LEADING BUILT-UP ROOFING MANUFACTURERS:

Barrett Division
Allied Chemical & Dye Corporation
Bestwall-Certain-teed Sales Corporation
Bird & Son, Inc.
The Philip Carey Manufacturing Company
The Flintkote Company
Lloyd A. Fry Roofing Company
The Johns-Manville Sales Corporation
Koppers Company
The Logan-Long Company
Reilly Tar & Chemical Corporation
The Ruberoid Company

ADVANTAGES

ELIMINATES ADHESIVES
HERMETICALLY SEALS AS IT PENETRATES
ENDS EXPANSION AND CONTRACTION PROBLEMS
ECONOMICAL, FEWER MAN-HOURS TO APPLY
NO SPECIAL TOOLS — HAMMER DRIVEN
DRIVES LIKE A NAIL — HOLDS LIKE A RIVET

FUNCTION AND USES

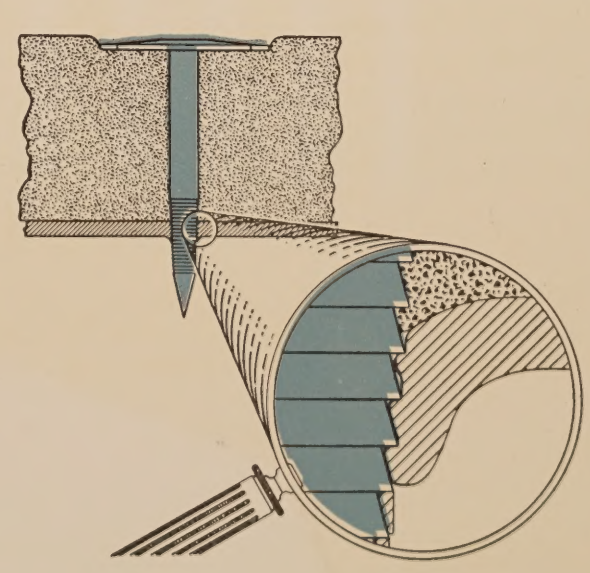
RIV-NAIL permanently nails insulation, with or without vapor barrier, to level or sloped metal roof decks.

By eliminating adhesives between insulation and deck RIV-NAIL speeds application and minimizes, in the event of an internal fire, the possibility of flammable materials flowing to the interior of the building.

Unlike adhesives, RIV-NAIL permits normal expansion and contraction of metal deck without disturbing insulation and built-up roofing.

With Vapor Barrier — RIV-NAIL eliminates two courses of adhesives and firmly fastens insulation and barrier to the deck in a single operation. There is no vapor leakage at penetration point. (See Test Data)

Without Vapor Barrier — Where no separate vapor protection is required RIV-NAIL quickly and economically attaches insulation to deck, assuring no vapor leakage at penetration point.



DESCRIPTION

RIV-NAIL is a tapered, heat treated steel nail driven with an ordinary hammer. As the nail advances through a metal deck, annular cutting edges on the tapered lower shank shape and wedge the steel of the deck into grooves in the nail.

Because of the taper, succeeding cutting edges repeat this locking action progressively as the nail advances.

THIS LOCKING ACTION IS SO COMPLETE THAT IT HERMETICALLY SEALS THE NAIL TO THE DECK.

TEST DATA — Complete test reports available upon request.

WIND UPLIFT — FACTORY MUTUAL LABORATORIES REPORT #13126-924 and #13126S1, determined "RIV-NAIL" exceeded the wind uplift requirement of 60 pounds per square foot to meet the Factory Mutual Laboratories standards for Class I construction when attaching vegetable fiber insulation board to 22 gage and heavier steel decks. One "RIV-NAIL" is required for each 2 sq. ft. of insulation board.

CORROSION RESISTANCE — STANDARD NAVY SALT SPRAY TEST EQUIPMENT — RIV-NAIL, treated with #201 Paraplant was tested for resistance to corrosion in accordance with Specification ASTM B117-49T and found to be more resistant than nickel plated fasteners.

HERMETIC SEAL — U. S. TESTING COMPANY, INC., HOBOKEN, N. J. — Report #38824 determined that RIV-NAIL hermetically seals itself when driven into 22 gage metal.

CONDENSATION TEST — U. S. TESTING COMPANY, INC. — Report #38824 adjudged, by means of controlled temperature tests, that no condensation occurred at nail points on a metal deck with 1" insulation and 4-ply felt built-up roofing subjected to minus 40° F. outdoor temperature and 66° F. indoor temperature (106° temperature differential).

TESTED AND ACCEPTED BY FACTORY MUTUAL LABORATORIES FOR CLASS I CONSTRUCTION

TECHNICAL DATA

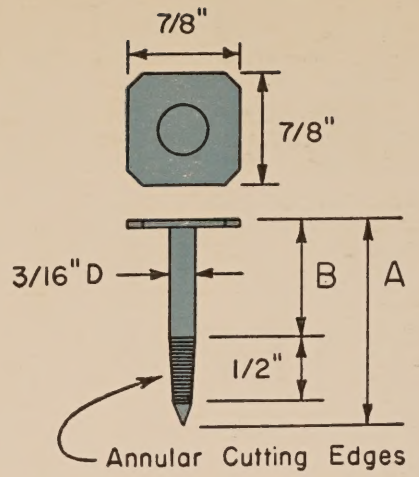
RIV-NAIL is manufactured in sizes to accommodate insulation of the following thicknesses:

½", ¾", 1", 1½", 2".

Nail Size	Insulation Thickness	Dim. A	Dim. B
#100	½"	1-3/16"	3/8"
#125	¾"	1-7/16"	5/8"
#150	1"	1-11/16"	7/8"
#200	1½"	2-3/16"	1-3/8"
#250	2"	2-11/16"	1-7/8"

Material: Shank — mild steel, formed and surface hardened to Rockwell C-60.

Head — strip steel, .040" thick.



Corrosion Resistant Coating: Entire nail treated with #201 Paraplant Turbine Oil.

HOLDING POWER (in pounds per fastener):

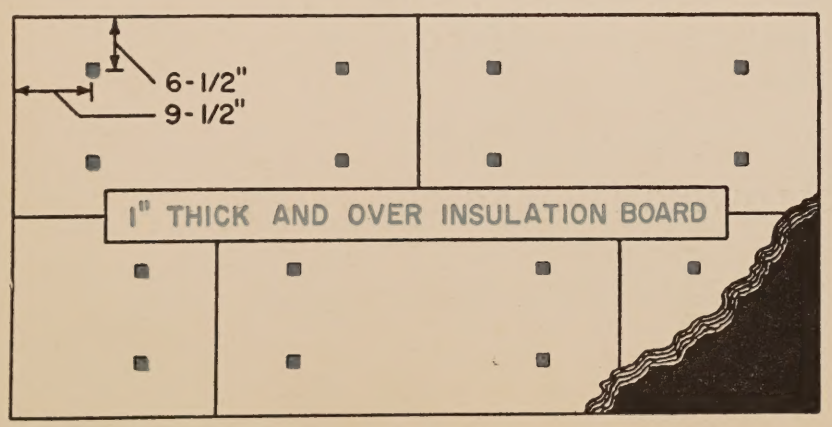
Material	18 Gage	20 Gage	22 Gage
Steel	500 lbs	300 lbs	200 lbs.
Aluminum 61ST	450 lbs	330 lbs	270 lbs
Aluminum 25-1/2 H.	260 lbs	180 lbs	150 lbs

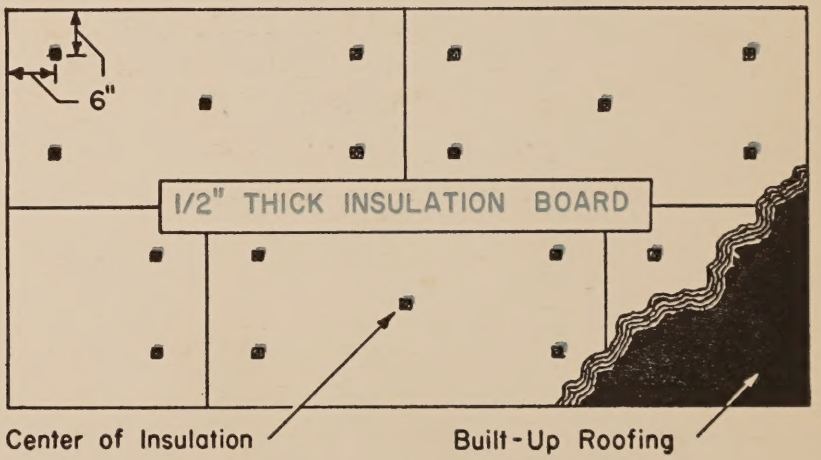
EXCEEDS FACTORY MUTUAL LABORATORIES UPLIFT REQUIREMENTS IN ALL GAGES

IN HEAVIER GAGE DECKS HOLDING POWER IS PROPORTIONATELY GREATER

SUGGESTED SPECIFICATION

Whether used on flat or sloped roof, with or without a vapor barrier, use 4 "RIV-NAILS" per 24" x 48" size insulation board 1" thick and over. This is in accordance with the Factory Mutual Tests and the specifications of the leading Built-up Roofing Manufacturers. When ½" insulation board is used use 5 "RIV-NAILS" per sheet of insulation.





RIV-NAIL is distributed by leading roofing and building materials wholesale suppliers in the United States and Canada.

Manufactured by: ES/PRODUCTS, INC.

642 Fayette Street, Mamaroneck, N. Y.